

DELPHACODES DETECTA (VAN D.) AND A NEW CLOSELY RELATED SPECIES (HOMOPTERA- FULGORIDAE-DELPHACINAE)

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***Delphacodes detecta* (Van Duzee)**

Liburnia detecta Van Duzee, Bull. Buff. Soc. Nat. Sci., V, p. 248 (1897).
Liburnia circumcincta Van Duzee, Bull. Buff. Soc. Nat. Sci., IX, p. 203 (1909).
Megamelus vanduzeei Crawford, Proc. U. S. Nat. Mus., Vol. 46, p. 622, 1914.

"Macropterous form: Broad and stout. Color soiled whitish; basal angles of the scutellum and beneath, especially in the female, quite strongly tinged with yellow. Face black; a longitudinal line in the middle of each compartment of the front and a shorter one on the cheeks fulvous, carinae white; basal foveae of the vertex pale, base of the scutellum, disc of the pleural pieces, some marks on the base of the vertex in the male, and the claws, blackish. The black on the base of the scutellum is mostly covered by the pronotum but on either side it is extended backward as a black line next to the patagia. Tergum black, the broad margins and a transverse band near the apex whitish in the male, fulvous in the female. Elytra whitish, nervures concolorous, the marginal heavy and brown around the apex; the inner apical areoles with a faint longitudinal fuscous cloud. Tips of the last segment of the connexivum black in the female. Length, male $3\frac{1}{2}$, female 4 mm.

"The genital characters of the male are similar to those of *pellucida*; styles quite broad, widely divergent, their apex rounded and a little twisted. All the pieces black except the edge of the anal tube.

"New York. Described from one pair received from Mr. E. B. Southwick, taken in New York City."

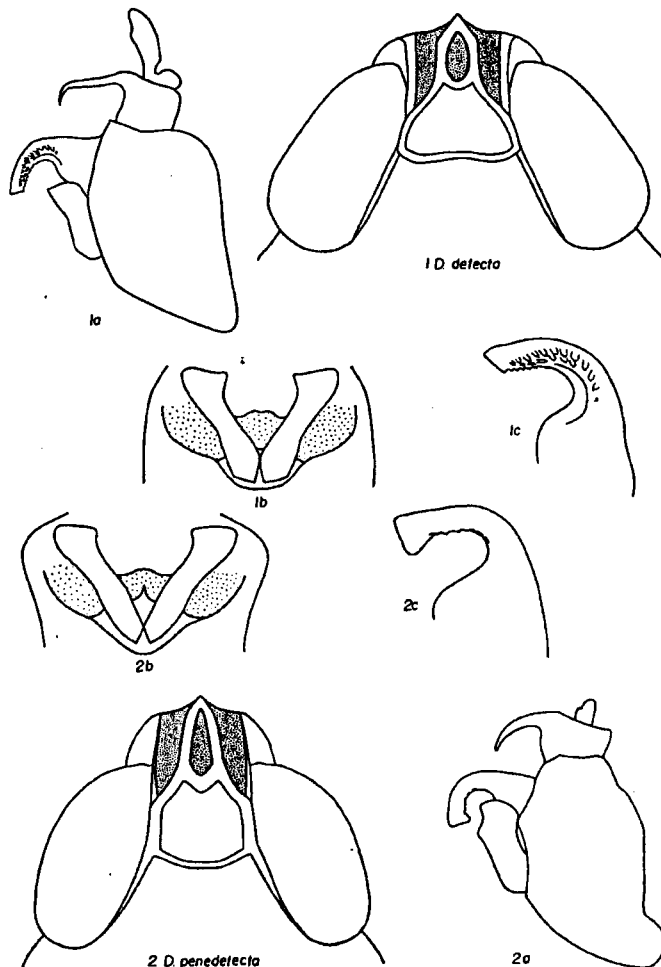
Brachypterous form:

Resembling the macropterous form but elytra short, barely longer than wide.

Structure: First segment of antennae about as long as wide; front about twice as long as wide, widest near middle, narrowed toward each end, distinctly tricarinate; crown about as wide as long, extending in front of eye about one-fourth its length, carinae distinct; elytra slightly longer than wide, apices broadly rounded, veins raised.

Color: General color stramineous; area between carinae of front and median fovea of crown black; dorsum of lateral fourth of first four abdominal segments dark except on posterior and lateral margin; male genital capsule dark brown except about median third of dorsum.

Genitalia: In lateral view, pygofer of male more or less rectangular; anal segment with a pair of long slender processes curving out at apices; aedeagus widest at base, strongly converging on ventral margin near basal third to about one-third basal width, curving in a semicircle to blunt apex, lateral margins of outer half with numerous short teeth; aedeagal brace not visible; styles broad, sides more or less parallel, outer margin concave. In caudal view, aedeagal brace slightly raised dorsally with slight median notch; styles widest and more or less avicephaliform at apices.



EXPLANATION OF PLATE

1. *Delphacodes detecta* (Van D.), dorsal view of head; 1a, lateral view of genital capsule, showing anal segment with processes, aedeagus and styles; 1b, caudo-ventral view of genital capsule, showing aedeagal brace and styles; 1c, enlarged view of aedeagus in lateral view.
2. *Delphacodes penedecta* n. sp., dorsal view of head; 2a, lateral view of genital capsule, showing anal segment with processes, aedeagus and styles; 2b, caudo-ventral view of genital capsule, showing aedeagal brace and styles; 2c, enlarged view of aedeagus in lateral view.

Holomorphotype ♂, allomorphotype ♀, 5♂ and 6♀ paramorphotypes, Mystic, Conn., Aug. 8, 1946, R. H. Beamer; other paramorphotypes: 2♂♂ and 1♀, same place and date, J. D. Beamer; 2♂♂ and 1♀, Cape Henry, Va., July 3, 1938, P. W. Oman.

Morphotypes and paramorphotypes in the Snow Entomological Collections, paramorphotypes in the U. S. National Museum.

Delphacodes penelecta n. sp.

Brachypterous form:

Resembling *Delphacodes detecta* but crown about one-third longer than basal width instead of as wide as long and distinctly narrowed toward apex. Length ♂ 2.5 mm., ♀ 3 mm.

Structure: First segment of antennae about twice as long as wide; front about five times as long as greatest width, widest on apical third, distinctly narrowed on basal third, very slightly so at extreme apex, strongly tricarinate; crown one-third longer than basal width, narrowed from base to apex, extending in front of eyes about one third its length, strongly carinate; elytra more or less rectangular, longer than wide, apices broadly rounded, veins raised.

Color: General color stramineous; frontal carinae bordered with dark; most of dorsum of first three abdominal segments and nearly all of genital capsule brown to black.

Genitalia: In lateral view, pygofer of male more or less rectangular with anterior-ventral corner extended anteriorly; anal segment with a pair of curved processes about as long as width of segment, not curving laterally as in *detecta*; aedeagus wide on basal third, narrowed on ventral margin near basal third to one-fourth basal width, curved ventrally in semicircle, apex widened and ventral margin with roughened corrugations, lateral margins without teeth; aedeagal brace not visible; styles broad, sides almost parallel, concave near outer third on inner margin, convex in same region on outer margin. In caudal view, aedeagal brace slightly produced but not excavated at apex; styles widest at apices, spatulate with inner corner somewhat acute.

Holotype ♂, allotype ♀, and 3♂ paratypes, Cedar Keys, Fla., March 8, 1947, L. D. Beamer; other paratypes: 4♂♂, same place and date, R. H. Beamer; 1♂ same place, August 10, 1939, J. D. Beamer; 1♂, Slidell, La., March 3, 1947, R. H. Beamer; 7♂♂ and 4♀♀, Sarasota, Fla., March 16, 1928; 3♂♂, Jacksonville, Fla., March 29, 1928, E. D. Ball; 3♂♂, Daytona, Fla., Feb. 28, 1928, E. D. Ball; 1♂ and 1♀, same place and collector, Dec. 5, 1926.

Types and paratypes in Snow Entomological Collections, paratypes in U. S. National Museum.

Macropterous form:

Like the brachypterous form but with flight wings; elytra extending about one-third their length beyond the abdomen, widest in region of cross-veins, rather milky in color; pronotum lighter.

Holomorphotype ♂ and 1♂ paramorphotype, Buras, La., June 21, 1948, R. H. Beamer; allomorphotype ♀, same place and date, E. L. Todd.

Morphotypes in the Snow Entomological Collections.

SOME NEW AND POORLY-KNOWN ADOXOMYIINAE¹ (DIPTERA, STRATIOMYIDAE) FROM THE SOUTHWEST

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The present paper presents descriptions of two new forms of *Adoxomyia*, from the Snow Entomological Collection of the University of Kansas, and notes which the author has accumulated on other *Adoxomyiinae* from the southwestern United States.

Genus *ADOXOMYIA* Kertész

1907, Ann. Mus. Nat. Hungarici, 5:499.

The Nearctic species of *Adoxomyia* have been treated by the author in two previous papers (James, 1935, 1943). The discovery of two new forms in our fauna necessitates this addition.

Adoxomyia appressa cibolae, new subspecies

Similar to the typical form, except that the antenna of the male is entirely black and the knees and extreme apices of all tibiae are reddish. These differences seem trivial, but they appear to be constant. The male runs in my key (James, 1943, p. 166) to *rustica* O. S. but may readily be distinguished by its appressed mesonotal pile and the predominantly white pile of the face; the female runs to a typical *appressa* and is less easily distinguished, the more distinctly pale knees and tibial apices being, perhaps, the most diagnostic character. The subspecific name refers to the Cibola National Forest, near the edge of which the type locality is situated.

Holotype, male Tijique, New Mexico, June 25, 1941, (R. H. Beamer); Snow Entomological Collection of the University of Kansas. **Allotype**, female, same data. **Paratype**; 26 males, 3 females, same data; 7 males, Tijique, New Mexico, June 25, 1941 (E. L. Todd); 1 male, Jemez Springs, New Mexico, July 1, 1941 (R. H. Beamer).

The form *cibolae* seems to be a northeastern subspecies of *appressa*. My records indicate that typical *appressa* runs from southern New Mexico (Cloudcraft, type locality) through Arizona (Grand Canyon, Oak Creek Canyon) to southern California (Coalinga, El Portal), whereas *cibolae* occurs in central and northern New Mexico.

Adoxomyia micheneri, new species

Male. — Black. Eyes with rather dense, black pile, that is longer than first antennal segment. Pile of face and cheeks dense, mostly silvery, a few black hairs on the face; occipital orbits silver-tomentose. Ratio of scape, pedicel, flagellum, and style 4.5:15.7. The first three segments of flagellum reddish, antenna otherwise black.

Mesonotum and scutellum mostly pale-yellow-tomentose; three black-tomentose stripes extending almost the length of the mesonotum, but not quite reaching the anterior margin or the scutellum. Mesonotum with abundant, long, erect pile, blackish on the sides, otherwise white. Scutellum with long, mostly black pile dorsally and on the spines, and with two prom-

¹ Equals *Clitellariinae* of Authors.